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# NORTH CAROLINA STATE UNIVERSITY

SCHOOL OF PHYSICAL AND MATHEMATICAL SCIENCES

DEPARTMENT OF GEOSCIENCES  
Box 5966 Zip 27607

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## Quarterly Progress Report

June 1974 - August 1974

Investigation Title: Utilization of EREP Data in Geological Evaluation,  
Regional Planning, Forest Management, and Water  
Management in North Carolina

EREP Investigation No.: 018

Contract No.: NAS9-13321

Principal Investigator: Charles W. Welby

Date: September 27, 1974

NASA Technical Monitor: Mr. James C. Derington  
S&E - EA  
Marshall Space Flight Center  
NASA  
Marshall Space Flight Center, Alabama 35812

During the quarter June 1974 - August 1974 efforts on evaluation of the  
SKYLAB imagery concentrated on the Asheville area.

The imagery was studied to evaluate methods of interpretation that might be  
readily available to local planners in North Carolina. A land-use map of  
part of Buncombe County was constructed from the Asheville imagery, and  
copies were made available to planning personnel in the Asheville area for  
checking. The input from these people is yet to come in.

A preliminary guide to the interpretation of SKYLAB imagery in the Ashe-  
ville areas has been prepared. The development of this guide is predicated  
upon the fact that the techniques and methods of interpretation can be  
applied in similar mountainous areas of North Carolina and adjacent areas.

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(E74-10772) UTILIZATION OF EREP DATA IN  
GEOLOGICAL EVALUATION, REGIONAL PLANNING,  
FOREST MANAGEMENT, AND WATER MANAGEMENT  
IN NORTH CAROLINA (North Carolina State  
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In late August a concentrated study on the imagery from the northeastern part of the state was begun. It appears that the chief use of the imagery will be in land-use analysis and in mapping wetlands areas. Unfortunately, an environmentally critical area was cloud-covered at the time of the SKYLAB pass in August 1973. Comparison of the SKYLAB photographs with appropriate ERTS imagery will be made. Ground truth information is being assembled.

Work continues on the evaluation of the imagery of the North Carolina Piedmont. Standard photographs interpretation techniques are being used, although photographic manipulation of some of the S 190A imagery will be attempted.

Funding appears adequate to carry the study to December 1974. However, it may be necessary to extend the project until June 1975 in order to bring together the many fragments of the investigation and to have time for suitable input from local planning personnel. Additional funding will probably be required to accomplish the extension.